

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | | | |
|-----------------|--|---------------|--------------|
| Name of Company | COG OPERATING LLC | Contact | Pat Ellis |
| Address | 550 W. Texas, Suite 100, Midland, TX 79701 | Telephone No. | 432-230-0077 |
| Facility Name | Maljamar SWD 29 #1 | Facility Type | SWD |

| | | | | | |
|---------------|---------|---------------|--|------------------|--------------|
| Surface Owner | Federal | Mineral Owner | | Lease No. (API#) | 30-025-39519 |
| | | | | Closest well | |

LOCATION OF RELEASE

| | | | | | | | | |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
| O | 29 | 17 | 32E | | | | | Lea |

Latitude 32.799583 Longitude 103.787183

NATURE OF RELEASE

| | | | | | |
|-----------------------------|--|---|------------|----------------------------|----------------------|
| Type of Release | Produced water with skim oil | Volume of Release | 20bbls | Volume Recovered | 15bbls |
| Source of Release | 4" discharge line rotted causing pipe to unthread. | Date and Hour of Occurrence | 09/27/2012 | Date and Hour of Discovery | 09/27/2012 2:00 a.m. |
| Was Immediate Notice Given? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Not Required | If YES, To Whom? | | | |
| By Whom? | Date and Hour | | | | |
| Was a Watercourse Reached? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. | | | |

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

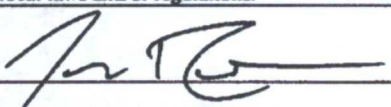
A 4" discharge line rotted which caused pipe to come unthreaded, releasing produced fluid onto the location and pasture. We have replaced the corroded pipe with new piping.

Describe Area Affected and Cleanup Action Taken.*

Initially 20bbls were released and we were able to recover 15bbls with a vacuum truck. The spill area traveled west and south of the pad location. Tetra Tech will sample the spill site area to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD/BLM for approval prior to any significant remediation work.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

OIL CONSERVATION DIVISION

| | | | |
|-----------------|---|-------------------------|-----------------------------------|
| Signature: |  | | |
| Printed Name: | Josh Russo | | |
| Title: | HSE Coordinator | Approval Date: | Expiration Date: |
| E-mail Address: | jrusso@conchoresources.com | Conditions of Approval: | Attached <input type="checkbox"/> |
| Date: | 10/02/2012 | Phone: | 432-212-2399 |

* Attach Additional Sheets If Necessary



TETRA TECH

HOBBS OCD

January 18, 2013

JAN 18 2013

RECEIVED

Mr. Geoffrey Leking
Environmental Engineer Specialist
Oil Conservation Division, District 1
1625 North French Drive
Hobbs, New Mexico 88240

Re: Work Plan for the COG Operating LLC., Maljamar 29 #1 SWD, Unit O, Section 29, Township 17 South, Range 32 East, Lea County, New Mexico.

Mr. Leking:

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating LLC. (COG) to assess a spill that occurred at the Maljamar 29 #1 SWD located in Unit O, Section 29, Township 17 South, Range 32 East, Lea County, New Mexico (Site). The spill site coordinates are N 32.79974°, W 103.78716°. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report, the leak was discovered on September 27, 2012 and released approximately twenty (20) barrels of produced water with a skim of oil from a leaking 4" discharge line located on the pad near the well. Approximately fifteen (15) barrels of fluids were recovered. The spill originated on the pad and migrated southwest across the pad into the pasture. The initial C-141 form is enclosed in Appendix A.

Groundwater

No water wells were listed within Section 29. According to the NMOCD groundwater map, the depth to groundwater in this area is approximately 150' below surface. The groundwater data is shown in Appendix B

Tetra Tech

1910 North Big Spring, Midland TX 79705
Tel: 432.682.4559 Fax: 432.682.3946 www.tetratech.com

Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 5,000 mg/kg.

Soil Assessment and Analytical Results

On October 30, 2012, Tetra Tech personnel inspected and sampled the spill area. The spill area on the pad measured approximately 20' x 200' and 20' x 130' in the pasture area. A total of seven (7) auger holes (AH-1 through AH-7) were installed using a stainless steel hand auger to assess the impacted soils. Selected samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The sampling results are summarized in Table 1. The auger hole locations are shown on Figure 3.

Referring to Table 1, all of the auger hole samples were below the RRAL for TPH and BTEX. The areas of AH-1 and AH-2 showed a shallow chloride impact and were vertically defined with chloride concentrations of 24.6 mg/kg (1-1.5') and 134 mg/kg (2-2.5'), respectively. The remaining auger holes were not vertically defined. Auger holes (AH-1, AH-5, AH-6 and AH-7) did show the chlorides concentrations declining, but spiked with depth towards the auger hole bottoms.

On November 30, 2012, Tetra Tech supervised the installation of soil borings to assess the areas not vertically defined. A total of five (5) soil borings were installed to a depth of approximately 20.0' below surface. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The sampling results are summarized in Table 1. The soil boring locations are shown on Figure 3.

Referring to Table 1, the chloride impacted areas were vertically defined and significantly declined at 14-15' below surface. Soil borings (SB-6 and SB-7) did not show a significant impact to the upper soils (0 to 3.0') and spiked at approximately 6'-7' and 9'-10' below surface. The deeper samples at 14-15' significantly declined with depth.



Work Plan

COG proposes to remove impacted material as highlighted (green) in Table 1 and shown on Figure 4. In the areas of AH-1 (SB-1) and AH-3, the proposed excavation depths will range from 1.0' to 3.0' below surface and approximately 4.0' in the area of AH-2 (SB-3). The areas of AH-5 (SB-3), AH-6 (SB-4) and AH-7 (SB-7) will be excavated to a depth of approximately 9.0' to 10.0' below surface.

As shown in Table 1, the shallow soils (0 to 3.0') in the areas of AH-6 and AH-7 did not show a significant chloride impact the soils. Prior to excavating the soils to approximately 9.0' to 10.0', Tetra Tech proposes to excavate these areas to an approximate depth of 3.0' below surface and field screen the excavated soils for chlorides. Based on the results, either the soil will be transported to disposal or used to backfill these areas. Tetra Tech will contact the NMOCD and BLM to review the sampling results for proper approval.

All of the excavated impacted material will be transported offsite for proper disposal. Once the final excavation depths are achieved, the site will be backfilled with clean material and brought to grade.

Due to the location of the spill, the proposed excavation depths or deeper excavation may not be achieved due to wall cave ins, limited access, oil and gas equipment, electrical, structures or lines which may not be feasible or practicable to be removed due to safety concerns. As such, Tetra Tech will excavate the soils to the maximum extent practicable. If the impacted soils are not accessible or a deeper impact is encountered, the spill area will be excavated, capped with a 40 mil liner or clay material at 3.0' to 4.0' below surface and backfilled with clean soil.

Upon completion, a final report will be submitted to the NMOCD. If you have any questions or comments concerning the assessment or the proposed remediation activities for this site, please call me at (432) 682-4559.

Respectfully submitted,
TETRA TECH

Ike Tavarez, PG
Senior Project Manager

cc: Pat Ellis – COG
cc: Jennifer Van Curen – BLM

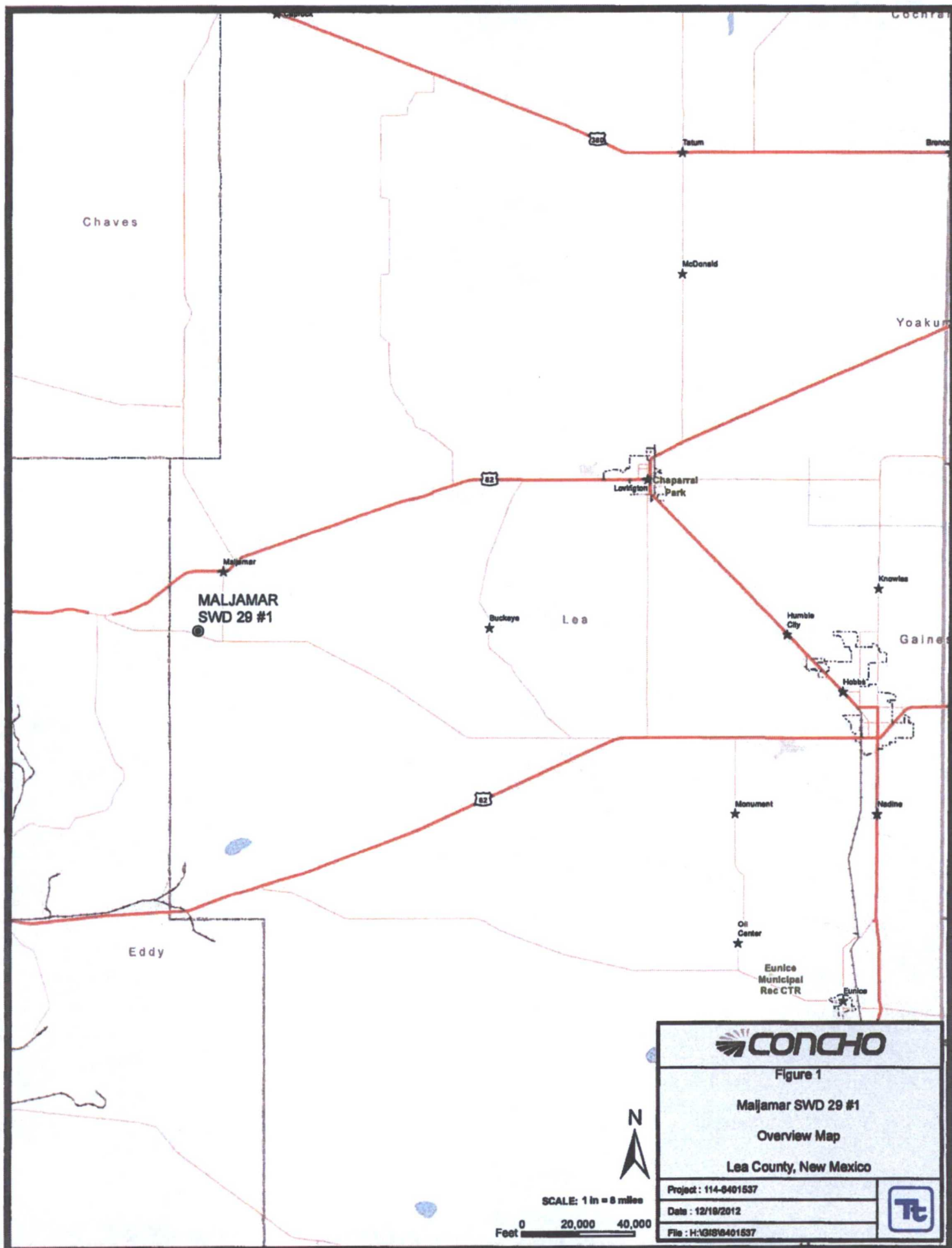


Figure 1

Maljamar SWD 29 #1

Overview Map

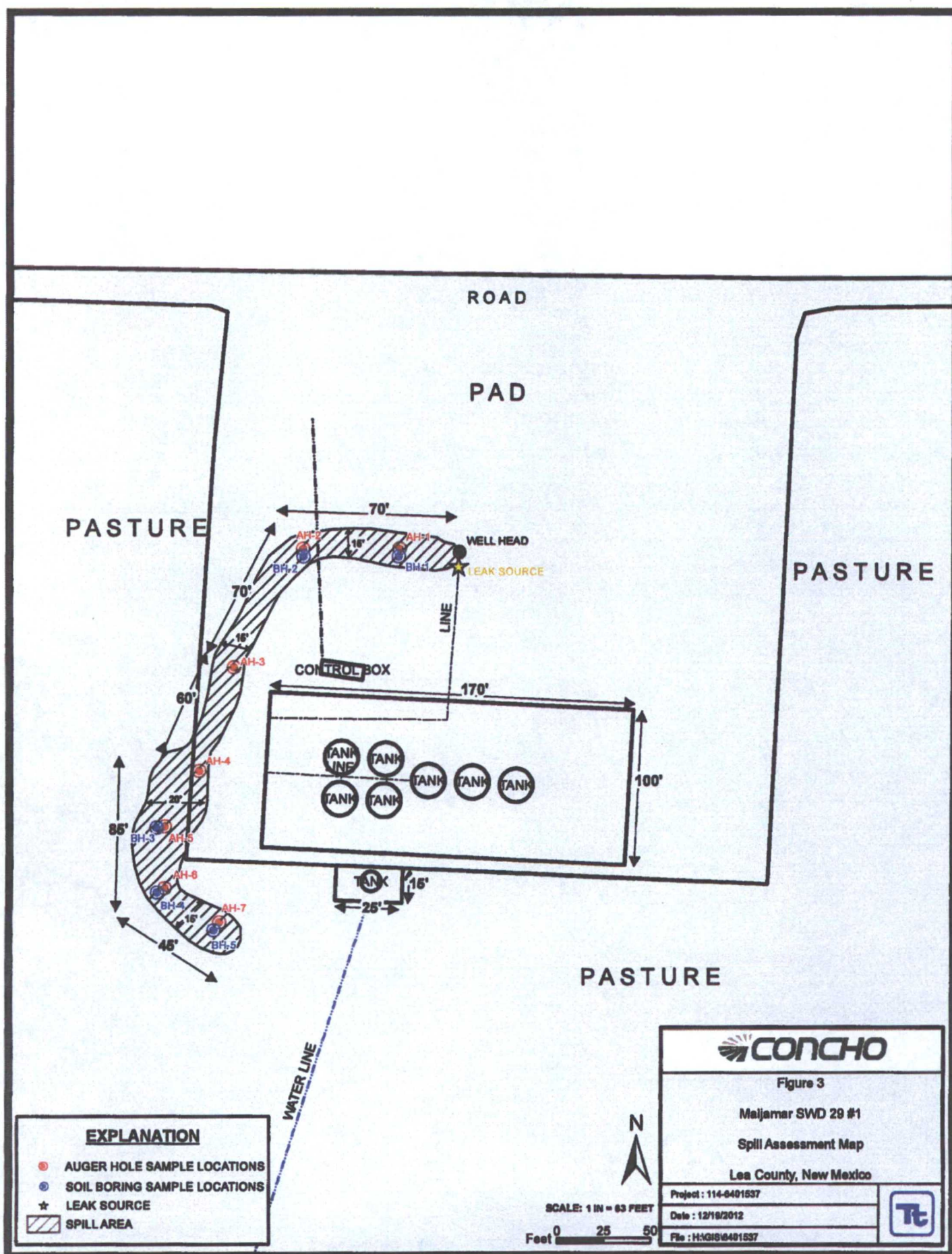
Lea County, New Mexico

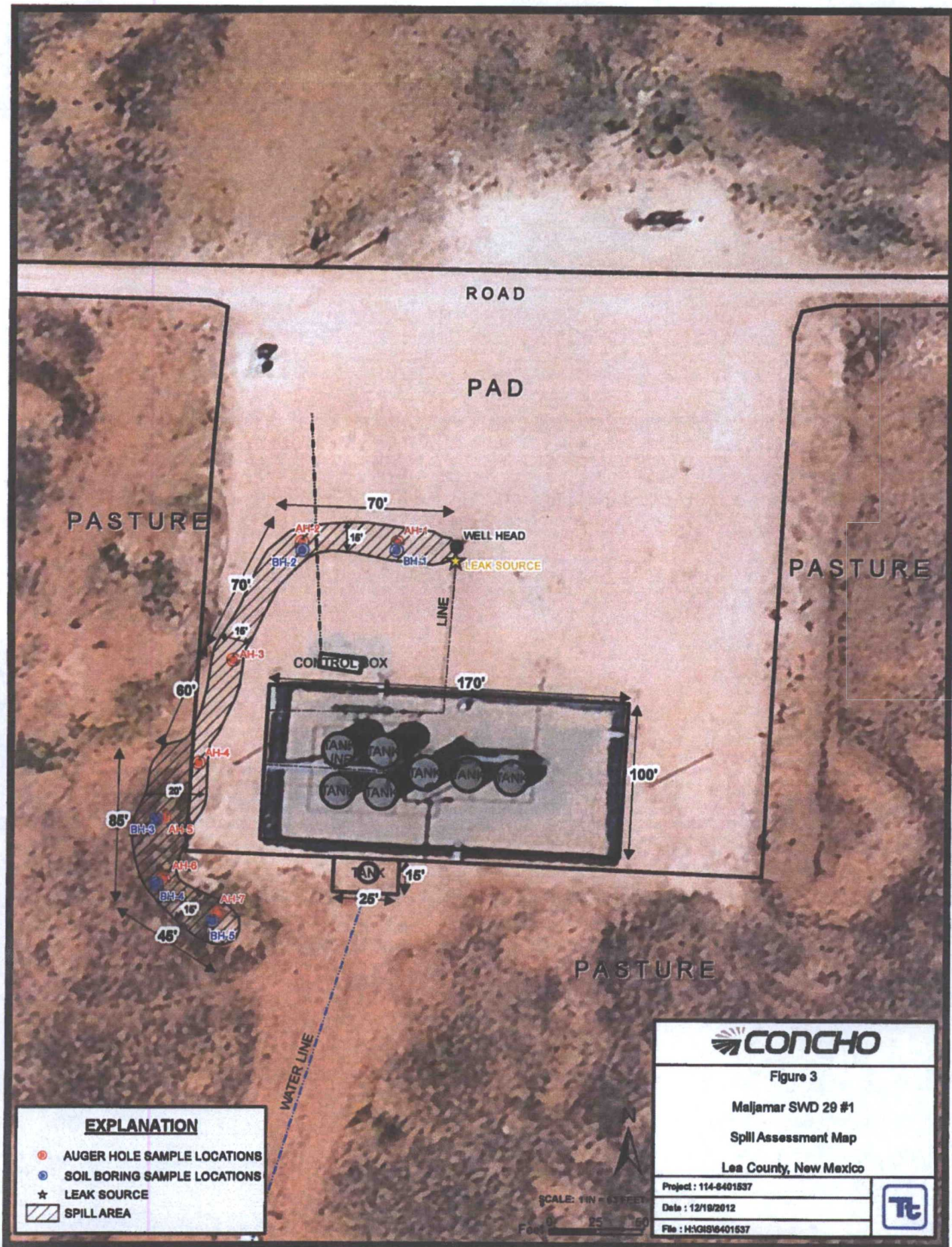
Project : 114-0401537

Date : 12/10/2012

File : H:\GIS\0401537







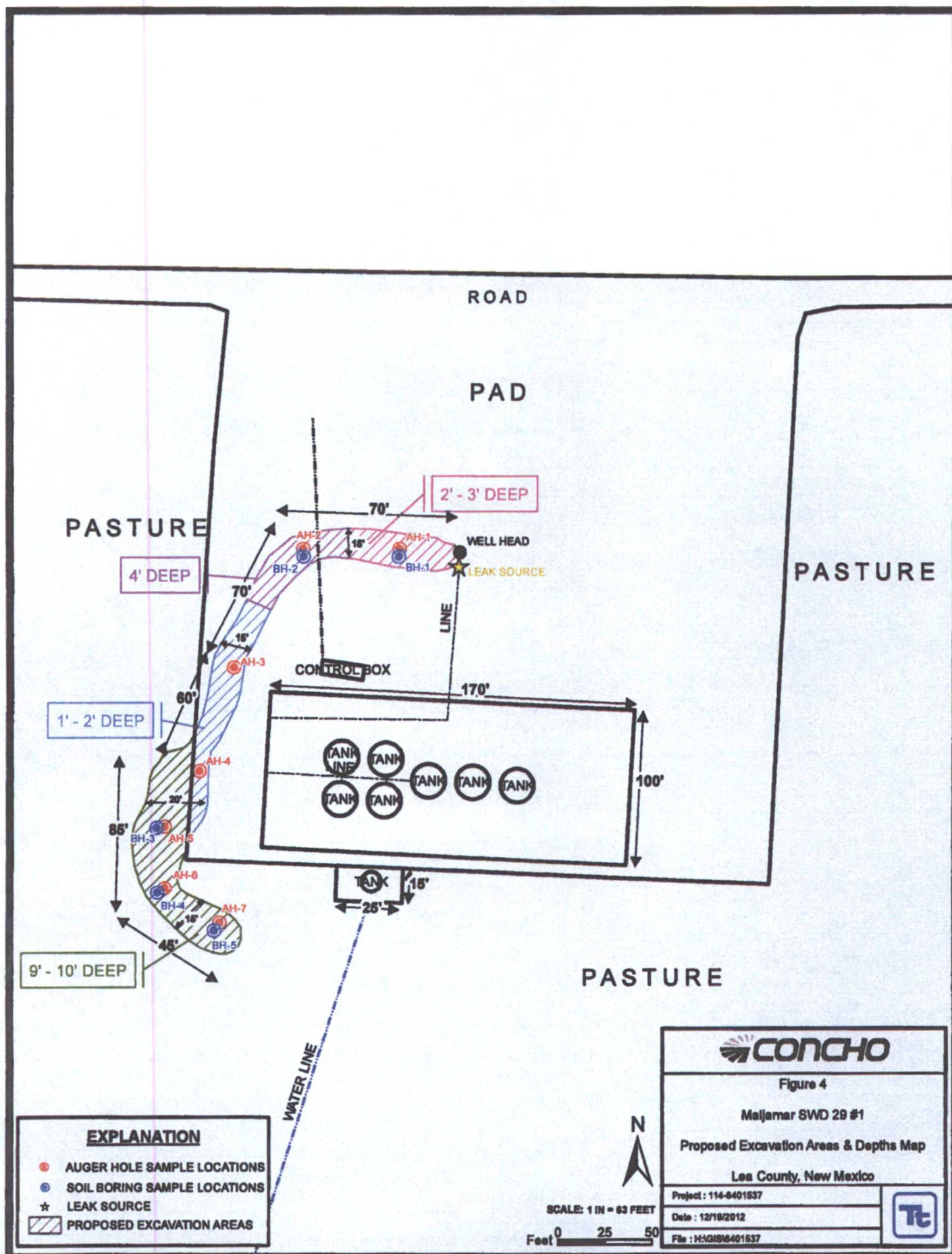


Table 1
COG Operating LLC.
Maljamar Salt Water Disposal 29 #1
Lea County, New Mexico

[illegible]

Table 1
COG Operating LLC.
Majamar Salt Water Disposal 29 #1
Lea County, New Mexico

[illegible]

Table 1
COG Operating LLC.
Majamar Salt Water Disposal 29 #1
Lea County, New Mexico

[illegible]

Table 1
COG Operating LLC.
Maljamar Salt Water Disposal 29 #1
Lea County, New Mexico

| Sample ID | Sample Date | Sample Depth (ft) | Soil Status | | TPH (mg/kg) | | | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Xylene (mg/kg) | Total BTEX (mg/kg) | Chloride (mg/kg) |
|-----------|-------------|-------------------|-------------|---------|-------------|-------|-------|-----------------|-----------------|----------------------|----------------|--------------------|------------------|
| | | | In-Situ | Removed | GRO | DRO | Total | | | | | | |
| AH-7 | 10/30/2012 | 0-1 | X | | <4.00 | <50.0 | <50.0 | <0.0200 | <0.0200 | <0.0200 | <0.0200 | <0.0200 | 798 |
| | " | 1-1.5 | X | | - | - | - | - | - | - | - | - | 587 |
| | " | 2-2.5 | X | | - | - | - | - | - | - | - | - | 2,770 |
| | " | 3-3.5 | X | | - | - | - | - | - | - | - | - | 471 |
| | " | 4-4.5 | X | | - | - | - | - | - | - | - | - | 2,840 |
| | " | 5-5.5 | X | | - | - | - | - | - | - | - | - | 7,380 |
| SB-5 | 11/30/2012 | 0-1 | X | | - | - | - | - | - | - | - | - | 1,090 |
| | " | 2-3 | X | | - | - | - | - | - | - | - | - | 1,030 |
| | " | 4-5 | X | | - | - | - | - | - | - | - | - | <20.0 |
| | " | 6-7 | X | | - | - | - | - | - | - | - | - | 6,330 |
| | " | 9-10 | X | | - | - | - | - | - | - | - | - | 3,770 |
| | " | 14-15 | X | | - | - | - | - | - | - | - | - | 106 |
| | " | 19-20 | X | | - | - | - | - | - | - | - | - | 139 |

(-) Not Analyzed

Proposed excavation areas and depths

Shallow soils will be field screened (chlorides) - Determine if soil will be used for backfilling or transported to disposal

COG Operating LLC
Maljamar SWD 29 #1
Lea County, New Mexico



TETRA TECH



Areas of AH-1 and AH-2 on pad



Areas of AH-3 and AH-4 on the pad.

COG Operating LLC
Maljamar SWD 29 #1
Lea County, New Mexico



TETRA TECH



Areas of AH-5 and AH-6 in the pasture



Area of AH-7 in the pasture

Water Well Data
Average Depth to Groundwater (ft)
COG - Maljamar SWD 29 #1
Lea County, New Mexico

| 16 South 31 East | | | | | |
|------------------|----|----|----|----|----|
| 6 | 5 | 4 | 3 | 2 | 1 |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |
| 290 | | | | | |

| 16 South 32 East | | | | | |
|------------------|----|----|----|----|-----|
| 6 | 5 | 4 | 3 | 2 | 1 |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |
| | | | | | 260 |

| 16 South 33 East | | | | | |
|------------------|-----|----|-----|----|----|
| 6 | 5 | 4 | 3 | 2 | 1 |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |
| 190 | 168 | | 160 | | |

| 17 South 31 East | | | | | |
|------------------|----|----|----|----|-----|
| 6 | 5 | 4 | 3 | 2 | 1 |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |
| | | | | | 271 |

| 17 South 32 East | | | | | |
|------------------|----|----|----|----|----|
| 6 | 5 | 4 | 3 | 2 | 1 |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |
| | | | | | |

| 17 South 33 East | | | | | |
|------------------|----|----|----|----|----|
| 6 | 5 | 4 | 3 | 2 | 1 |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |
| | | | | | |

| 18 South 31 East | | | | | |
|------------------|----|----|----|----|-----|
| 6 | 5 | 4 | 3 | 2 | 1 |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |
| | | | | | 261 |

| 18 South 32 East | | | | | |
|------------------|----|----|----|----|----|
| 6 | 5 | 4 | 3 | 2 | 1 |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |
| | | | | | |

| 18 South 33 East | | | | | |
|------------------|----|----|----|----|----|
| 6 | 5 | 4 | 3 | 2 | 1 |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |
| | | | | | |

88 New Mexico State Engineers Well Reports

105 USGS Well Reports

90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)

Geology and Groundwater Resources of Eddy County, NM (Report 3)

178 Temporary monitor well installed - 178' dry well

34 NMOCD - Groundwater Data

123 Field water level

143 NMOCD Groundwater map well location

SAMPLE LOG

Boring/Well: TMW-1
 Project Number: 114-6400438
 Client: COG
 Site Location: Rhino
 Location: Lea Co., NM
 Legals: T-17S R-32E Sec35
 Total Depth: 130
 Date Installed: 03/16/11
 Gauged: 3/23/11 - 133' Dry Well TOC

| DEPTH (Ft) | OVM | SAMPLE DESCRIPTION |
|------------|-----|---|
| 5 | -- | Very loose brown sand - dry blow sand |
| 10 | -- | Very soft white clay - dry caliche powder |
| 15 | -- | Loose tan sand w/ 1mm gravel - very dry |
| 20 | -- | Loose tan sand w/ 2.5mm gravel - very dry |
| 25 | -- | Loose reddish sand well sorted - very dry |
| 30 | -- | Soft silty clay brown/reddish - dry |
| 35 | -- | Soft reddish silty clay - dry |
| 40 | -- | Soft tan silty clay - dry |
| 45 | -- | Soft red silty clay - dry |
| 50 | -- | Stiff brown/reddish clay - dry |
| 55 | -- | Stiff brown/reddish clay - dry |
| 60 | -- | Stiff brown/reddish clay - dry |
| 65 | -- | Stiff red clay - dry (Redbed) |
| 70 | -- | Medium stiff red silty clay powder - very dry |
| 75 | -- | Medium stiff red silty clay powder - very dry |
| 80 | -- | Medium stiff red silty clay powder - very dry |
| 85 | -- | Medium stiff red silty clay powder - very dry |
| 90 | -- | Medium stiff red silty clay powder - very dry |
| 95 | -- | Medium stiff red silty clay powder - very dry |
| 100 | -- | Medium stiff red silty clay powder - very dry |
| 105 | -- | Medium stiff red silty clay powder - very dry |
| 110 | -- | Medium stiff red silty clay powder - very dry |
| 115 | -- | Medium dense silty sandy clay |
| 120 | -- | Medium stiff red clay - very dry |
| 125 | -- | Medium stiff red clay - very dry |
| 130 | -- | Medium stiff red clay - very dry |

Total Depth 130' Groundwater was not encountered

Summary Report

Ike Tavarez
Tetra Tech
1910 N. Big Spring Street
Midland, TX 79705

Report Date: November 8, 2012

Work Order: 12110209



Project Location: Lea Co., NM
Project Name: COG/Maljamar SWD 29 #1
Project Number: 114-6401537

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|--------|--------------|--------|------------|------------|---------------|
| 313240 | AH 1 0-1' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313241 | AH 1 1-1.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313242 | AH 1 2-2.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313243 | AH 1 3-3.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313244 | AH 1 4-4.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313245 | AH 1 5-5.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313246 | AH 1 6-6.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313247 | AH 1 7-7.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313248 | AH 1 8-8.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313249 | AH 1 9-9.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313250 | AH 2 0-6 in. | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313251 | AH 3 0-1' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313252 | AH 3 1-1.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313253 | AH 3 2-2.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313254 | AH 3 3-3.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313255 | AH 3 4-4.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313256 | AH 4 0-1' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313257 | AH 4 1-1.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313258 | AH 4 2-2.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313259 | AH 4 3-3.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313260 | AH 4 4-4.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313261 | AH 5 0-1' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313262 | AH 5 1-1.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313263 | AH 5 2-2.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313264 | AH 5 3-3.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313265 | AH 5 4-4.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313266 | AH 5 5-5.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313267 | AH 5 6-6.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313268 | AH 5 7-7.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313269 | AH 5 8-8.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|--------|-------------|--------|------------|------------|---------------|
| 313270 | AH 6 0-1' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313271 | AH 6 1-1.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313272 | AH 6 2-2.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313273 | AH 6 3-3.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313274 | AH 6 4-4.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313275 | AH 6 5-5.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313276 | AH 6 6-6.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313277 | AH 6 7-7.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313278 | AH 7 0-1' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313279 | AH 7 1-1.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313280 | AH 7 2-2.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313281 | AH 7 3-3.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313282 | AH 7 4-4.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |
| 313283 | AH 7 5-5.5' | soil | 2012-10-30 | 00:00 | 2012-11-02 |

| Sample - Field Code | BTEX | | | | TPH DRO - NEW | TPH GRO |
|-----------------------|--------------------|--------------------|-------------------------|-------------------|----------------|----------------|
| | Benzene (mg/Kg) | Toluene (mg/Kg) | Ethylbenzene (mg/Kg) | Xylene (mg/Kg) | DRO (mg/Kg) | GRO (mg/Kg) |
| 313240 - AH 1 0-1' | <0.0200 | <0.0200 | <0.0200 | <0.0200 | <50.0 | <4.00 |
| 313250 - AH 2 0-6 in. | <0.0200 | <0.0200 | <0.0200 | <0.0200 | <50.0 | <4.00 |
| 313251 - AH 3 0-1' | <0.0200 | <0.0200 | <0.0200 | <0.0200 | <50.0 | <4.00 |
| 313256 - AH 4 0-1' | <0.0200 | <0.0200 | <0.0200 | <0.0200 | <50.0 | <4.00 |
| 313261 - AH 5 0-1' | <0.0200 | <0.0200 | <0.0200 | <0.0200 | <50.0 | <4.00 |
| 313270 - AH 6 0-1' | <0.0200 | <0.0200 | <0.0200 | <0.0200 | 107 | <4.00 |
| 313278 - AH 7 0-1' | <0.0200 | <0.0200 | <0.0200 | <0.0200 | <50.0 | <4.00 |

Sample: 313240 - AH 1 0-1'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 11600 | mg/Kg | 4 |

Sample: 313241 - AH 1 1-1.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 1680 | mg/Kg | 4 |

Sample: 313242 - AH 1 2-2.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 1370 | mg/Kg | 4 |

Sample: 313243 - AH 1 3-3.5'

Report Date: November 8, 2012

Work Order: 12110209

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| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 1730 | mg/Kg | 4 |

Sample: 313244 - AH 1 4-4.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 882 | mg/Kg | 4 |

Sample: 313245 - AH 1 5-5.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 1550 | mg/Kg | 4 |

Sample: 313246 - AH 1 6-6.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 1300 | mg/Kg | 4 |

Sample: 313247 - AH 1 7-7.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 157 | mg/Kg | 4 |

Sample: 313248 - AH 1 8-8.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 1910 | mg/Kg | 4 |

Sample: 313249 - AH 1 9-9.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 1780 | mg/Kg | 4 |

Sample: 313250 - AH 2 0-6 in.

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 2230 | mg/Kg | 4 |

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Sample: 313251 - AH 3 0-1'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 4750 | mg/Kg | 4 |

Sample: 313252 - AH 3 1-1.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 24.6 | mg/Kg | 4 |

Sample: 313253 - AH 3 2-2.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <20.0 | mg/Kg | 4 |

Sample: 313254 - AH 3 3-3.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <20.0 | mg/Kg | 4 |

Sample: 313255 - AH 3 4-4.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <20.0 | mg/Kg | 4 |

Sample: 313256 - AH 4 0-1'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 5880 | mg/Kg | 4 |

Sample: 313257 - AH 4 1-1.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 3450 | mg/Kg | 4 |

Sample: 313258 - AH 4 2-2.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 134 | mg/Kg | 4 |

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Sample: 313259 - AH 4 3-3.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <20.0 | mg/Kg | 4 |

Sample: 313260 - AH 4 4-4.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <20.0 | mg/Kg | 4 |

Sample: 313261 - AH 5 0-1'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 1820 | mg/Kg | 4 |

Sample: 313262 - AH 5 1-1.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 1260 | mg/Kg | 4 |

Sample: 313263 - AH 5 2-2.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 1300 | mg/Kg | 4 |

Sample: 313264 - AH 5 3-3.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 1080 | mg/Kg | 4 |

Sample: 313265 - AH 5 4-4.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 1100 | mg/Kg | 4 |

Sample: 313266 - AH 5 5-5.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 1530 | mg/Kg | 4 |

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Sample: 313267 - AH 5 6-6.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 6160 | mg/Kg | 4 |

Sample: 313268 - AH 5 7-7.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 5890 | mg/Kg | 4 |

Sample: 313269 - AH 5 8-8.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 5420 | mg/Kg | 4 |

Sample: 313270 - AH 6 0-1'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 176 | mg/Kg | 4 |

Sample: 313271 - AH 6 1-1.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 117 | mg/Kg | 4 |

Sample: 313272 - AH 6 2-2.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 1290 | mg/Kg | 4 |

Sample: 313273 - AH 6 3-3.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 357 | mg/Kg | 4 |

Sample: 313274 - AH 6 4-4.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 2020 | mg/Kg | 4 |

Sample: 313275 - AH 6 5-5.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 7510 | mg/Kg | 4 |

Sample: 313276 - AH 6 6-6.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 8820 | mg/Kg | 4 |

Sample: 313277 - AH 6 7-7.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 18600 | mg/Kg | 4 |

Sample: 313278 - AH 7 0-1'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 798 | mg/Kg | 4 |

Sample: 313279 - AH 7 1-1.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 587 | mg/Kg | 4 |

Sample: 313280 - AH 7 2-2.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 2770 | mg/Kg | 4 |

Sample: 313281 - AH 7 3-3.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 471 | mg/Kg | 4 |

Sample: 313282 - AH 7 4-4.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 2840 | mg/Kg | 4 |

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Sample: 313283 - AH 7 5-5.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 7380 | mg/Kg | 4 |